AMENDMENTS TO THE CLAIMS

1 - 20. Cancelled

21 (Currently amended). An electric power generating unit having constituents comprising:

(i) an ammonia storage device in the form of a container comprising an ammonia absorbing and releasing salt of the general formula:

$$M_a(NH_3)_nX_z,$$

wherein:

M is one or more cations selected from the group consisting of alkali metal, alkaline earth metal, and transition metal ions, or combinations thereof,

X is one or more anions selected from the group consisting of fluoride, chloride, bromide, iodide, nitrate, thiocyanate, sulphate, molybdate, and phosphate ions,

a is the number of cations per salt molecule,

z is the number of anions per salt molecule, and

n is the coordination number of 2 to 12;

(ii) means for heating said container and ammonia absorbing and releasing salt for releasing ammonia gas; and

at least one of (iii) an ammonia fuel cell for converting ammonia directly into electric power and~~; or~~ (iv) a reactor for dissociating ammonia into hydrogen and nitrogen and a hydrogen fuel cell for converting hydrogen into electric power.

22 (Previously Presented). The electric power generating unit according to claim 21, wherein M comprises a member selected from the group consisting of Li, Na, K, Cs, Mg, Ca, V, Cr, Mn, Fe, Co, Ni, Cu, Zn, NaAl, KAl, K_2Zn, CsCu, and K_2Fe.

23 (Previously Presented). The electric power generating unit according to claim 21 further comprising means for adding ammonia to saturate the ammonia absorbing and releasing salt with ammonia.

24 (Previously Presented). The electric power generating unit according to claim 21, wherein said ammonia absorbing and releasing salt comprises $Mg(NH_3)_6Cl_2$.

25 (Previously Presented). The electric power generating unit according to claim 21, wherein the salt comprises a powder of microcrystals.

26 (Previously Presented). The electric power generating unit according to claim 21, wherein the salt further comprises a porous support material.

27 (Previously Presented). The electric power generating unit according to claim 21, wherein the means for heating comprises an electrical resistive heating device.

28 (Previously Presented). The electric power generating unit according to claim 21, wherein said means for heating comprises heat produced by chemical reactions.

29 (Previously Presented). The electric power generating unit according to claim 21, wherein the container and means for heating are a part of a micro-size electric system that can be fabricated using a process selected from the group consisting of mechanical grinding, chemical vapour desposition (CVD), plasma enhanced chemical vapour deposition (PECVD), electron cyclotron resonance (ECR), sputtering, etching and lithography.

30 (Previously Presented). The electric power generating unit according to claim 29, wherein the process is selected from the group consisting of electron beam lithography, photo lithography, or laser lithography.

31 (Currently amended). The electric power generating unit according to claim 21, wherein the reactor for dissociating ammonia comprises a heterogeneous catalyst.

32 (Currently amended). The electric power generating unit according to claim 31, wherein said heterogeneous catalyst comprises a support and an active phase.

33 (Currently amended). The electric power generating unit according to claim 32, wherein said active phase comprises dispersed nanoparticles of transition metals or compounds thereof.

34 (Currently amended). The electric power generating unit according to claim 33, wherein said active phase comprises Co_3Mo_3N, Ru, Co, Ni, Fe, or mixtures thereof.

35 (Currently amended) The electric power generating unit according to claim 21, further comprising a combustion device wherein a part of the hydrogen produced in the reactor, unreacted hydrogen from one of the fuel cells, or a mixture thereof is oxidized for providing heat for heating the ammonia storage device.

36 (Currently amended). The electric power generating unit according to claim 21, further comprising a combustion device wherein a fraction of the hydrogen produced in the reactor, unreacted hydrogen from one of the fuel cells, or a mixture thereof is oxidized for providing heat for heating said reactor for dissociating ammonia.

37 (Currently amended). The electric power generating unit according to claim 21, further comprising a combustion device wherein a fraction of the ammonia released from the ammonia storage, unreacted ammonia from one of the fuel cells, or a mixture thereof is oxidized for providing heat for heating said ammonia storage device.

38 (Currently amended). The electric power generating unit according to claim 21, further comprising a combustion device wherein a fraction of the ammonia released from the ammonia storage, unreacted ammonia from one of the fuel cells, or a mixture thereof is oxidized for providing heat for heating said reactor for dissociating ammonia.

39 (Currently amended). The electric power generating unit according to claim 21, wherein the constituents thereof are dimensioned to provide full balancing of the complete unit by dimensioning tubes, chambers, flows, insulation, and temperatures~~, etc.~~ to obtain optimal output of electrical energy from the electrical power generating unit.

40 (Currently amended). The electric power generating unit according to claim 21, comprising a unit in the form of a micro-size power source for microelectronic devices or micro-electro-mechanical-systems (MEMS).

41 (Currently amended). The electric power generating unit according to claim 21, wherein said reactor for dissociating ammonia is part of a micro-size electric system being that can be micro fabricated using a process selected from the group consisting of mechanical grinding, chemical vapour deposition (CVD), plasma enhanced chemical vapour deposition (PECVD), electron cyclotron resonance (ECR), sputtering, etching and lithography.

42 (Currently amended). The electric power generating unit according to claim 41, wherein said reactor for dissociating ammonia is part of a micro-size electric system being that can be micro fabricated using a process selected from the group consisting of electron beam lithography, photo lithography, or laser lithography.

43 (Currently amended). The electric power generating unit according to claim 21, wherein the reactor for dissociating ammonia is divided into two parts, one part operated at

a low temperature that dissociates most ammonia and another part operated at a high temperature that dissociates a last present fraction of ammonia.

44 (Previously Presented). A method for producing electrical power, said method comprising:

providing an ammonia storage in the form of a container comprising an ammonia absorbing and releasing salt of the general formula:

$$M_a(NH_3)_nX_z,$$

wherein:

M is one or more cations selected from alkali metals, alkaline earth metals, and transition metals, or combinations thereof,

X is one or more anions selected from fluoride, chloride, bromide, iodide, nitrate, thiocyanate, sulphate, molybdate, phosphate, and chlorate ions,

a is the number of cations per salt molecule,

z is the number of anions per salt molecule, and

n is the coordination number of 2 to 12;

providing means for heating said container and ammonia absorbing and releasing salt for releasing ammonia gas;

providing (i) a fuel cell for converting ammonia directly into electric power or (ii) a reactor for dissociating ammonia into hydrogen and nitrogen and a fuel cell for converting hydrogen into electric power; and

producing electrical power.

45 (Currently amended). The method according to claim 44~~47~~, wherein M comprises a member selected from the group consisting of Li, Na, K, Cs, Mg, Ca, V, Cr, Mn, Fe, Co, Ni, Cu, Zn, NaAl, KAl, K_2Zn, CsCu, and K_2Fe.

46 (Currently amended). The method according to claim 44~~47~~, wherein the electric power generating unit further comprises means for adding ammonia to saturate the ammonia absorbing and releasing salt with ammonia.

47 (New). A method for producing electrical power, said method comprising:

providing an electric power generating unit comprising:

an ammonia storage in the form of a container comprising an ammonia absorbing and releasing salt of the general formula:

$$M_a(NH_3)_nX_z,$$

wherein:

M is one or more cations selected from alkali metals, alkaline earth metals, and transition metals, or combinations thereof,

X is one or more anions selected from fluoride, chloride, bromide, iodide, nitrate, thiocyanate, sulphate, molybdate, phosphate, and chlorate ions,

a is the number of cations per salt molecule,

z is the number of anions per salt molecule, and

n is the coordination number of 2 to 12;

a means for heating said container and ammonia absorbing and releasing salt for releasing ammonia gas; and

(i) a fuel cell for converting ammonia directly into electric power or (ii) a reactor for dissociating ammonia into hydrogen and nitrogen and a fuel cell for converting hydrogen into electric power;

heating the container to release amonia; and

producing electrical power.